## CLAIMS

What is claimed is:

1. An apparatus for graphics rendering in a mobile device comprising:

a command queue capable of receiving a plurality of rendering commands, a generate_event command and a wait_until command, wherein the wait_until command corresponds to the completion of an operation indicated by the generate_event command;

a direct memory access device coupled to the command queue, the direct memory access device capable of receiving a memory access command in response to the generate_event command;

a memory device storing rendering information, the memory device accessible in response to the generate_event command; and

the command queue capable of queuing the rendering commands in response to the wait_until command until the completion of the operation indicated by the generate_event command.

2. The apparatus of claim 1 wherein the memory device is an external memory device, the apparatus further comprising:

the external memory device storing a plurality of rendering data sets; and

an embedded memory device capable of storing one of the plurality of rendering data sets.

3. The apparatus of claim 2 wherein the memory access command includes loading one of the plurality of rendering data sets from the external memory to the embedded memory.

4. The apparatus of claim 3 wherein the embedded memory includes a plurality of memory portions and the plurality of rendering data set is loaded to one of the plurality of memory portions.

5. The apparatus of claim 3 wherein the external memory is a secure digital memory card.

6. The apparatus of claim 1 further comprising:

a graphics rendering engine operably coupled to the command queue such that the graphics rendering engine generates the rendering commands, the generate_event command and the wait_until command.

7. The apparatus of claim 6 further comprising:

a command processor, coupled to the command queue and the direct memory access device such that the processor executes the rendering commands.

8. The apparatus of claim 7 wherein the rendering commands include accessing the rendering information in the memory device.

9. The apparatus of claim 1 wherein the generate_event command includes a pointer such that upon completion of the event, the pointer is provided to the command queue.

10. A method for graphics rendering in a mobile device comprising:

receiving a generate_event command from a graphics engine such that the generate_event command provides a memory access request to perform a memory operation;

beginning the performance of the memory operation;

receiving a wait_until command;

in response to the wait_until command, waiting until the memory operation is complete; and

providing at least one rendering command to a command processor.

11. The method of claim 10 further comprising:

receiving the at least one rendering command; and

queuing the at least one render command until the memory operation is complete.

12. The method of claim 11 further comprising:

receiving an event flag with the generate_event command; and

upon completion of the generate_event command, using the event flag to indicate the completion of the memory operation.

13. The method of claim 10 wherein the generate_event command includes transferring a first render data set from an external memory to a first portion of an internal memory.

14. The method of claim 13 wherein the external memory is a secure digital memory card and the render data set is texture information.

15. The method of claim 10 wherein the at least one render command is received from a graphics engine.

16. A graphics rendering chip in a mobile device comprising:

a command queue capable of receiving a plurality of rendering commands, a generate_event command and a wait_until command, wherein the wait_until command corresponds to the completion of an operation indicated by the generate_event command;

a direct memory access device coupled to the command queue, the direct memory access device capable of receiving a memory access command in response to the generate_event command;

an embedded memory device capable storing rendering information; and

an external memory interface coupleable to an external memory device such that rendering information may be provided, in response to the generate_event command, to the embedded memory

the command queue capable of queuing the rendering commands in response to the wait_until command until the completion of the operation indicated by the generate_event command.

17. The graphics rendering chip of claim 16 further comprising:

a graphics rendering engine operably coupled to the direct memory access; and

a command processor coupled to the command queue such that the rendering commands may be provided to the command processor when the operation indicated by the generate_event command is completed.

18. The graphics rendering chip of claim 16 wherein the external memory device is a secure digital memory card.

19. The graphics rendering chip of claim 16 operable coupleable to a central processor via a flex cable.

20. The graphics rendering chip of claim 16 capable of being mounted on the flex cable within the mobile device.

21. The graphics rendering chip of claim 16 operable coupleable to at least one display such that command processor upon generating a video display output, the video display output may be provided to the at least one display.

22. The graphics rendering chip of claim 16 operably coupleable to a camera such that a capture video image may be received and processed by the command processor.

23. The graphics rendering chip of claim 16 wherein:

the rendering information is at least one of:

texture data vertex data and scene description data.

24. A mobile device comprising:

a baseband receiver operably coupled to a wireless antenna;

a central processing unit operably coupled to a processing unit memory module;

a video display controller operably coupled to the central processing unit;

a video display unit coupled to the video display controller such that a video display output may be provided to the video display unit by the video display controller;

a graphics rendering chip coupled to the central processing unit, wherein the graphics rendering chip includes an embedded memory device, a direct memory access device and an external memory interface; and

an external memory device operably coupleable to the graphics rendering chip across the external memory interface, wherein the external memory device stores at least one of a plurality of rendering data sets that may be provided to the embedded memory for the processing of the video display output by the graphics rendering chip such that the video display output may be provided to the video display controller.

25. The mobile device of claim 24, wherein the video display controller is coupled to the central processing unit via a flex cable and the graphics rendering chip is mounted on the flex cable.

26. The mobile device of claim 24 wherein the external memory device is a secure digital card.

27. The mobile device of claim 24 wherein the graphics rendering chip further includes:

a command queue capable of receiving a plurality of rendering commands, a generate_event command and a wait_until command, wherein the wait_until command corresponds to the completion of an operation indicated by the generate_event command;

a direct memory access device coupled to the command queue, the direct memory access device capable of receiving a memory access command in response to the generate_event command such that rendering information may be provided, in response to the generate_event command, to the embedded memory; and

the command queue capable of queuing the rendering commands in response to the wait_until command until the completion of the operation indicated by the generate_event command.

28. The mobile device of claim 27 further comprising:

a graphics rendering engine operably coupled to the direct memory access device; and

a command processor coupled to the command queue such that the rendering commands may be provided to the command processor when the operation indicated by the generate_event command is completed.

29. The mobile device of claim 24 operably coupleable to a camera such that a capture video image may be received and processed by the command processor.